**Amendments to the Claims:**

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1-14. (Canceled)

15. (Currently Amended) A polishing pad used for polishing a particular substrate having a known cross-sectional area, wherein grooves having a radial pattern are formed on a surface of the polishing pad, and an average value of the total volumes of all the groove parts existing immediately below the substrate in the grooves (an average value of the sum totals of the groove volumes in parts immediately below the substrate) is 0.06 to 0.23 when represented by [the~~by the~~ average value of the sum totals of the groove volumes in parts immediately below the substrate ~~(mm3)~~$(mm^3)$ / area of the substrate ~~(mm2)~~$(mm^2)$.

16. (Canceled)

17. (Currently Amended) The polishing pad according to Claim 15, wherein the grooves have a constant groove width and are formed so that angles between the grooves are more than the values obtained by the mathematical formula 1 as ~~follows.~~follows:

(Mathematical formula 1)

An angle between the grooves = $2 \times \sin^{-1}$ ~~2 x sin 1~~ (a width of the grooves / (2 x (a distance from the center of the polishing pad to the center of the substrate – a radius of the ~~substrate))~~substrate)).

18. (Canceled)

19 (Previously Presented) The polishing pad according to Claim 15, wherein the grooves have groove widths of 2.0 mm or less.

20. (Canceled)

21. (Previously Presented) The polishing pad according to Claim 15, wherein the polishing pad is a nonwoven type or a suede type.

22.     (Canceled)

23.     (Previously Presented)  A method for producing a substrate, comprising a step of polishing a substrate by using the polishing pad according to Claim 15.

24.     (Canceled)

25.     (Previously Presented)  The method for producing a substrate according to Claim 23, wherein as the substrate to be polished, a silicon single crystal wafer or an SOI wafer is used.

26.     (Canceled)

27.     (Currently Amended)  A method for processing a polishing pad which is a method for forming grooves on a surface of a polishing pad used for polishing a <u>particular</u> substrate <u>having a known cross-sectional area</u>, comprising forming the grooves so as to have a radial pattern, and at this time forming the grooves so that an average value of the total volumes of all the groove parts existing immediately below the substrate in the grooves (an average value of the sum totals of the groove volumes in parts immediately below the substrate) complies with a relation of 0.06 to 0.23 when represented by [the<u>the</u> average value of the sum totals of the groove volumes in parts immediately below the substrate (mm3)<u>(mm$^3$)</u> / area of the substrate (mm2)]<u>(mm$^2$)</u>.

28.     (Canceled)

29.     (Currently Amended)  The method for processing a polishing pad according to Claim 27, wherein the grooves are formed so that angles between the grooves are more than values obtained by the mathematical formula 1 as follows.<u>follows:</u>

(Mathematical formula 1)

An angle between the grooves = <u>2 x sin$^{-1}$</u>2 x sin 1 (a width of the grooves / (2 x (a distance from the center of the polishing pad to the center of the substrate − a radius of the substrate))<u>substrate))</u>.

30.    (Canceled)

31.    (Previously Presented)  The method for processing a polishing pad according to Claim 27, wherein the grooves are formed so as to have groove widths of 2.0 mm or less.

32.    (Canceled)

33.    (Previously Presented)  The method for processing a polishing pad according to Claim 27, wherein the polishing pad is a nonwoven type or a suede type.

34.    (Canceled)

35.    (Previously Presented)  A method for producing a substrate, comprising a step of polishing a substrate by using the polishing pad processed by the method according to Claim 27.

36.    (Canceled)

37.    (Previously Presented)  The method for producing a substrate according to Claim 35, wherein as the substrate to be polished, a silicon single crystal wafer or an SOI wafer is used.

38.    (Canceled)